

REMARKS

The last Office Action has been carefully considered.

It is noted that claims 1-3, 5 and 7 are rejected under 35 U.S.C. 102 over the patent to Harman.

Claims 1-5 and 7 are rejected under 35 U.S.C. 103 over the patent to Vassos in view of the patent to Tsai.

Also, the claims are objected to and rejected under 35 U.S.C. 112 for formal reasons.

In connection with the Examiner's formal objections and rejections, applicants have amended claim 1, the broadest claim on file, as well as other claims to more clearly define the present invention. Also, a second independent claim 8 has been submitted with claims 9-14 depending thereon. It is therefore believed that the Examiner's grounds for formal objections and rejections are no longer tenable and they should be withdrawn.

Turning now to the Examiner's rejection of the claims over the art, it is believed to be advisable to first of all explain to the Examiner in detail the subject matter of the present invention and its novel features.



A hand-guided drilling machine or percussion drilling machine in accordance with the present invention has the following elements:

comprising a machine housing (26),
a drilling spindle (13) having an axis,
a drive motor (11) for rotatably driving said drilling spindle (13),
a tool holder (12) formed as a drilling chuck and connected with
said drilling spindle (13), for example by a thread
said drilling spindle (13) during exchanging a tool or exchanging
said tool holder (12) receiving a releasing or tightening moment,
an arresting device (38) non-rotatably coupling said drilling
spindle (13) relative to said machine housing (26),
an intermediate shaft (17) non-rotatably connected with said
drilling spindle (13),
a component (44) connected with said machine housing (26),
said arresting device (38) being arranged between said
intermediate shaft (17) connected with said drilling spindle (13) and an
element selected from the group consisting of said machine housing (26) and
said component (44) connected with said machine housing,
said arresting device (38) opening during a torque transmission
from said drive motor (11) to the tool in one direction and closing during the
torque transmission from said tool holder (12) in an opposite direction.

A hand-guided drilling machine or percussion drilling machine in accordance with the present invention has the following elements:

comprising a machine housing (26),
a drilling spindle (13) having an axis,
a drive motor (11) for rotatably driving said drilling spindle (13),
a tool holder (12) formed as a drilling chuck and connected with said drilling spindle (13), for example by a thread
said drilling spindle (13) during exchanging a tool or exchanging said tool holder (12) receiving a releasing or tightening moment,
an arresting device (38) non-rotatably coupling said drilling spindle (13) relative to said machine housing (26),
an intermediate shaft (17) non-rotatably connected with said drilling spindle (13),
a component (44) connected with said machine housing (26),
said arresting device (38) being arranged between said intermediate shaft (17) connected with said drilling spindle (13) and an element selected from the group consisting of said machine housing (26) and said component (44) connected with said machine housing,
said arresting device (38) opening during a torque transmission from said drive motor (11) to the tool in one direction and closing during the torque transmission from said tool holder (12) in an opposite direction.

It is respectfully submitted that in the machine in accordance with the present invention the arresting device 38 is provided and arranged between the intermediate shaft 17 on the one hand, and the machine housing 26 or the component 44 connected to the machine housing on the other hand, for opening during a torque transmission from the drive motor 11 to the tool in one direction, and closing during the torque transmission from the tool holder 12 in an opposite direction. It should be mentioned that the arresting device blocks at a torque from the tool holder the drive motor in both directions of rotation, and opens at a torque from the drive motor to the tool holder also in both directions of rotation.

Turning now to the references and in particular to the patent to Harman, it can be seen that this patent is issued on application which was filed in the United States on July 9, 1998. It is respectfully submitted that the present patent application was filed in the United States on January 22, 1999 and is based on the German priority application filed on January 30, 1998, which is earlier than the priority of the patent application of the Harman patent. A translation of the priority document is enclosed herewith. It is therefore believed that the Harman reference can not be considered as a valid reference, and therefore the Examiner's rejection over this reference should be withdrawn.

Turning now to the patent to Vassos, it can be seen that this reference discloses a hand-held tool with a sub-assembly mounted by tool housing sections. This reference does not teach the above mentioned new features of the present invention, namely an arresting device arranged between an intermediate shaft connected with the drilling spindle on the one hand, and a machine housing or a component connected with the machine housing on the other hand, which opens during a torque transmission from a drive motor to a tool and automatically closes during the torque transmission from the tool holder in an opposite direction.

Thus, this reference taken singly does not teach the new features of present invention which are defined in claims 1 and 8.

The patent to Tsai discloses an automatic output shaft locking mechanism for electric tools. In this reference an arresting device is located between a driven shaft which is subdivided into an inner and an outer shaft. The inner and outer shafts are arranged coaxially with one another. The torques introduced by the tool holder are directly supported in the housing through the arresting device. When the arresting device is used to mount a tool holder on or to release a tool holder from the drilling spindle, when especially high torques can occur, to guarantee a reliable hold of the tool holder, the arresting device and a support in the housing must be especially robust, expensive and complicated. Because of the subdivision of the shaft

into two shafts additional parts are produced, in particular an additional shaft, and the machine is therefore longer. Furthermore, when the tool operates in a striking manner, the pulses are transmitted through the arresting device. The arresting device is needlessly loaded, and this can lead to an undesirable damping of the pulses.

These disadvantages are eliminated in the applicant's invention as defined in claims 1 and 8. In the applicant's invention the arresting device 38 is arranged on an intermediate shaft which extends parallel to the main shaft. High torques introduced by the tool holder, in particular during mounting and releasing of the tool holder, are reduced by the transmission stage and can be taken by a light and cost favorable arresting device and support in the housing.

With the mounting of the arresting device on the intermediate shaft, an available radial space can be used in a favorable manner, a short length of the machine can be provided, and a convenient handling is achieved. Furthermore, the arresting device is uncoupled from strikes of the striking mechanism, and the needless loading of the arresting device and the pulse damping are avoided.

It is believed that this reference also does not teach the new features of present invention which are now defined in the amended claims 1 and 8.

Since none of these two references teaches the new features of present invention which are defined in claims 1 and 8, therefore a combination of the references suggested by the Examiner would also lead to a construction which would not include these features.

It is therefore respectfully submitted that the rejection of the original claims under 35 U.S.C. 103 over the patent to Vassos in view of the patent to Tsai, should be considered as no longer tenable and should also be withdrawn.

As explained herein above the present invention is not disclosed in the references and can not be derived from them. In order to arrive at the applicant's invention from the references, the references have to be fundamentally modified, by changing their constructions, and including into them these features which were first proposed by the applicant. However, it is known that in order to arrive at a claimed invention, by modifying the references the cited art must itself contain a suggestion for such a modification.

This principle has also been consistently upheld by the U.S. Court of Customs and Patent Appeals which, for example, held in its decision in re Randol and Redford (165 USPQ 586) that

Prior patents are references only for what they clearly disclose or suggestion; it is not a proper use of a patent as a reference to modify its structure to one which prior art references do not suggest.

Definitely, the references do not contain any hint or suggestion for such critical modifications.

Also, as explained herein above, the present invention provides for the highly advantageous results which can not be accomplished by the constructions disclosed in the references. It is well known that in order to support a valid rejection the art must also suggest that it would accomplish applicant's results. This was stated by the Patent Office Board of Appeals, in the case Ex parte Tanaka, Marushima and Takahashi (174 USPQ 38), as follows:

Claims are not rejected on the ground that it would be obvious to one of ordinary skill in the art to rewire prior art devices in order to accomplish applicants' result, since there is no suggestion in prior art that such a result could be accomplished by so modifying prior art devices.


In view of the above presented remarks and amendments it is believed that claims 1 and 8, the broadest claims on file, should be considered as patentably distinguishing over the art and should be allowed.

As for the dependent claims, these claims depend on claims 1 and 8, they share its presumably allowable features, and therefore it is respectfully submitted that these claims should be allowed as well.

Reconsideration and allowance of present application is most respectfully requested.

Should the Examiner require or consider it advisable that the specification, claims and/or drawings be further amended or corrected in formal respects in order to place this case in condition for final allowance, then it is respectfully requested that such amendments or corrections be carried out by Examiner's Amendment, and the case be passed to issue. Any costs involved should be charged to the deposit account of the undersigned (No. 19-4675). Alternatively, should the Examiner feel that a personal discussion might be helpful in advancing this case to allowance, he is invited to telephone the undersigned (at 631-549-4700).

Respectfully submitted,



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